UNITED REPUBLIC OF TANZANIA

MINISTRY OF NATURAL RESOURCES AND TOURISM

NATIONAL FOREST POLICY IMPLEMENTATION STRATEGY (2021 - 2031)

MAY 2021

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ABBREVIATIONS AND ACRONYMS

AFRI 100	African Forest Landscape Restoration Initiative to restore 100 million ha
AIDS	Acquired Immune Deficiency Syndrome
BOT	Bank of Tanzania
CBD	Convention on Biological Diversity
CBFM	Community-Based Forest Management
CBOs	Community-Based Organisations
DPs	Development Partners
EAMCEF	Eastern Arc Mountains Conservation Endowment Fund
EIA	Environmental Impact Assessment
FORVAC	Forestry and Value Chains Development Programme
Ha	Hectares
HIV	Human Immunodeficiency Virus
JFM	Joint Forest Management
LGAs	Local Government Authorities
M&E	Monitoring and Evaluation
MIT	Ministry of Industry and Trade
MNRT	Ministry of Natural Resources and Tourism
MoEST	Ministry of Education, Science and Technology
MoFP	Ministry of Finance and Planning
MoHCDEC	Ministry of Health, Community Development, Gender Elderly and Children
MoU	Memorandum of Understanding
NAFORMA	National Forest Resource Monitoring and Assessment
NCMC	National Carbon Monitoring Centre
NFP	National Forest Policy

NFRs	Nature Forest Reserves
NGOs	Non-Governmental Organisations
PCCB	Prevention and Combating of Corruption Bureau
PFM	Participatory Forest Management
PFP	Private Forestry Programme
PO-RALG	President Office-Regional Administration and Local Government
PPD	Public-Private Dialogue
PPP	Public-Private Partnership
SADC	Southern Africa Development Community
SDGs	Sustainable Development Goals
TACAIDS	Tanzania Commission for AIDS
TanBIF	Tanzania Biodiversity Information Facility
TaFF	Tanzania Forest Fund
TAFORI	Tanzania Forestry Research Institute
TanTrade	Tanzania Trade Development Authority
TBS	Tanzania Bureau of Standards
TFS	Tanzania Forest Services Agency
TIC	Tanzania Investment Centre
TTSA	Tanzania Tree Seed Agency
UN	United Nations
UNCCD	United Nations Convention on Combating Desertification
UNFCCC	United Nations Framework Convention on Climate Change
VPO	Vice President Office

DEFINITIONS OF TERMS

Biodiversity is the variability among living organisms and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems.

Catchment forest reserve is a forest area specifically recognized as a water source and performs multiple ecological functions including the attraction of rainclouds, stabilizing water flows; reducing erosion/landslides/floods in areas of steep topography and conserving biodiversity.

Climate change refers to both global warming driven by human emissions of greenhouse gases and the results in large scale shifts in weather patterns

Commercial Forestry refers to the science, art and practice of managing and processing trees and other forest products efficiently and sustainably to meet market demands with economic benefits.

Community-Based Forestry is a people-centred approach to forestry that recognizes local communities as key forest stakeholders and promotes their involvement in decision-making and implementation.

Deforestation is the direct human-induced conversion of forested land to non-forested land.

Ecosystem is a community of living organisms in conjunction with the non-living components of their environment (things like air, water and mineral soil), interacting as a system.

Forest is an area of land covering at least 0.5 hectares, with a minimum tree crown cover of 10% and a minimum height of 3.0 meters.

Forest certification is the vetting of particular natural and planted forests, and forest products to confirm that they are being sustainably managed according to an agreed set of standards.

Forest degradation is any process that reduces the density of flora or fauna in a forest, especially by removal of trees, which results in decreased interactions between these components, and more generally to its functioning.

Forest product includes all wood and non-wood forest materials either harvestable from forests or whose values have been added through processing.

Forest reserve is a forest area that is legally recognized and demarcated for production of timber and other forest products or for water catchment and biodiversity conservation.

Forest resources include all wood and non-wood capitals in a forest.

Joint Forest Management is a form of PFM, which is used to ensure effective management of forest resources whereby communities, can collaborate with central or local government in management of gazetted forest reserves

Local Government Authority includes a district council, city council, municipal council, town council, and village council.

Local community is a group of interacting people with common culture, traditions and beliefs and sharing a common environment.

Participatory forest management is a strategy, which allows stakeholders to participate in forest management through community-based forest management or joint forest management.

Private forest plantation is land planted with trees and held by any person/s or companies/institutions/bodies corporate with free hold or leasehold tenure for commercial or non-commercial purposes.

Forest plantation is a land area planted with trees for the production of timber and other forest/tree products.

Nature forest reserve is a forest whose prime function is the protection of the biodiversity and environment. Nature forest reserves are common in mountainous areas where they stabilize slopes, prevent avalanches, and protect water quality, and also in coastal areas, where they stabilize sand dunes.

Stakeholder is any person or group of persons organized or unorganized, who share a common interest or stake in a particular issue or system regarding the forest sector development.

Sustainable forest management is the stewardship and use of forest and forest lands in a way, and at a rate that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, and that does not cause damage to other ecosystems.

Tenure is holding of land or other property through arrangements such as leasehold, freehold, customary ownership, and other such forms of holding.

Tree is a woody perennial plant, typically having a single stem or multiple stems and growing to a considerable height and bearing lateral branches at some distance from the ground.

Watershed is an area or region drained by a river, river system, or other body of water.

Wetlands are areas of marsh, fern, peat land or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water and the depth of which at low tide does not exceed six meters.

FOREWORD

Management of the forest sector is guided by the National Forest Policy (NFP) of 1998. The NFP has been implemented for 23 years now, and during this period, there has been a number of institutional and policy reforms aimed at stimulating growth of the national economy. However, the reforms are known to have changed the macro-economic and environmental frameworks significantly, which in turn have affected the implementation of the NFP either positively or negatively.

In 2017, the Ministry of Natural Resources and Tourism (MNRT) undertook an evaluation to establish the implementation status of the NFP since its endorsement in 1998. The evaluation was meant to check as to whether the policy is still effective, efficient and relevant to address the challenges facing the sector, and as a prerequisite to prepare a new forest policy. The evaluation report together with the recommendations received from the Cabinet Secretariat with regards to the draft forest policy which was submitted for consideration concluded that, lack of implementation strategy of the 1998 Policy was among the key challenges that saddles development of the forest sector. This led to the recommendation that the National Forest Policy Implementation Strategy (NFPIS) be developed to guide the implementation of NFP (1998).

The National Forest Policy Implementation Strategy, an instrument for implementing the NFP of 1998, has been prepared following the recommendations from the evaluation report and Cabinet Secretariat, and expiry of the National Forest Programme (NFP) in 2010. The preparation of NFPIS has taken into consideration macro-economic and social policy development, and other related policies such as land, agriculture, beekeeping, wildlife and environment.

In addition, NFPIS has been prepared through broad based consultations at local and national levels with key stakeholders of related sectors and institutions. It should be stressed that the success of the implementation of this strategy depends on active participation of all stakeholders both local and international community. In view of this, MNRT calls upon all stakeholders and development partners to provide necessary support and cooperation to ensure achievement of the goals, objectives and targets of this Strategy.

Dr. Allan H. J. Kijazi

PERMANENT SECRETARY

MINISTRY OF NATURAL RESOURCES AND TOURISM

ACKNOWLEDGEMENT

The development of the National Forest Policy Implementation Strategy (NFPIS) (2021-2031) document is an outcome of the consultative process undertaken by the Ministry of Natural Resources and Tourism (MNRT) in 2020, to find a new framework that would guide the implementation of the National Forest Policy (NFP) of 1998 after the expiry of the National Forest Programme (NFP) in 2010. This process started by a review work which was undertaken by a special Task Force that was appointed by the Permanent Secretary in 2017. The Task Force under the coordination of the Forestry and Beekeeping Division - MNRT, worked very closely with the Lead Consultant from Food and Agriculture Organization (FAO) of the United Nations (Country Office). These experts came from MNRT, Ministry of Agriculture, Ministry of Energy and Minerals, Vice President's Office (Division of Environment), Presidents' Office – Regional Administration and Local Government, Ministry of Lands and Settlements, Tanzania Forest Community Network - (MJUMITA), Tanzania Forest Services (TFS) Agency and FAO-Country Office.

The second task force which was appointed by the Permanent Secretary in 2020 prepared the first draft of the document. These experts were from MNRT, Presidents' Office – Regional Administration and Local Government, Tanzania Institute of Social Work, TFS and Tanzania Forest Conservation Group (TFCG). In both occasions, a number of group specific consultative workshops were held to allow inputs from key stakeholders. One national consultative workshop was held on 18-19 January, 2018 in Morogoro to validate the Draft National Forest Policy. The other national consultative workshop was held on 22-23 April, 2021 in Morogoro to gather inputs for the improvement of the first draft of the NFPIS. In all the meetings, participants came from various Ministries, Departments and Agencies (MDAs), Local Government Authorities (LGAs), research and academic institutions, civil society organizations, the private sector and Non- Government Organisations (NGOs).

The review of NFP and formulation process of NFPIS received technical backstopping from FAO - Country Office in Tanzania, Tanzania National Business

Council Forestry Working Group (TNBC-FWG), Forestry Development Trust (FDT) especially in commercial forestry development in Tanzania and from the National Forest Advisory Committee (NAFAC). The Government of Tanzania through MNRT, PFP and FORVAC Programme, and Mpingo Conservation and Development Initiative (MCDI) in collaboration with World Wildlife Fund (WWF) provided financial support for its development. The Ministry of Natural Resources and Tourism acknowledges the contribution of each and every one in this commendable initiative. We are grateful to all specialists who provided extra inputs during the preparation of the Strategy. We appeal for continued participation and support during the implementation.

Dr. Ezekiel E. Mwakalukwa
DIRECTOR OF FORESTRY AND BEEKEEPING DIVISION

CHAPTER ONE

INTRODUCTION

1.1 Rationale for Policy Implementation Strategy

The government approved the National Forest Policy (NFP) in 1998 to spearhead the development of forest sector in Tanzania. Later in 2001, the National Forest Programme (NFP) (2001 - 2010) was endorsed as a tool to implement the NFP and enhance coordination of sectoral stakeholders, and to enable financing and implementation of planned development interventions. Further, a legal framework was put in place by enacting the Forest Act cap 323 in 2002 that was operationalised by the Forest Regulations Government Notice 153 of 2004. Consequently, implementation of the Policy has been through the National Forest Programme (NFP) up to 2010 when the programme ended. Following the expiry of NFP in 2010, implementation of NFP was carried out through other instruments including strategic plans and projects of forestry institutions.

In 2017-2018, the Ministry of Natural Resources and Tourism (MNRT) conducted an evaluation on NFP implementation as a prerequisite to prepare a new forest policy. The evaluation report together with the recommendations received from the Cabinet secretariat with regards to the draft forest policy which was submitted for consideration concluded that, lack of implementation strategy was among the key challenges that saddles development of the forest sector. This led to the recommendation that the National Forest Policy Implementation Strategy (NFPIS) be developed to guide the implementation of NFP (1998).

The NFPIS will spearhead the implementation of the Policy for the period of 10 years (2021/22 – 2031/32). Despite late development, the Strategy has taken into consideration the current status of the sector and other new emerging issues in the sector noted in the Tanzania Development Vision of 2025; CCM Manifesto of 2020; the Third National Five Years Development Plan (2021/22 – 2025/26), and the Sustainable Development Goals (2030). It entails the implementation plan, resources and means applied to mobilize resources that will enable proper Policy implementation. Further, the Strategy will guide preparation of sectoral plans and programmes for effective and efficient NFP implementation.

1.2 Issues for Implementation

The NFPIS will guide all interventions under the four forest policy areas and three cross-cutting issues. These areas are: forest land management; forest-based industries and products; ecosystem conservation and management, and institutions and human resources. The three cross-cutting issues are HIV/AIDS, gender and governance.

1.3 Roles and Responsibilities of Key Stakeholders

The Ministry responsible for forestry will entirely monitor and evaluate implementation of the Strategy. Sector Ministries will be engaged through joint implementation of interventions that require specific sector policy directives. Non-state actors and development partners will be engaged in building capacity in value chain interventions, financing and investing in sector development initiatives. Local communities will be involved directly in forest development and conservation activities while the private sector is expected to play a significant role in enhancing the economic contribution of the sector in the most sustainable manner.

1.4 Expected Results

NFP Implementation Strategy is basically expected to spearhead the achievement of the Policy goal: "*To enhance the contribution of the forest sector to the sustainable development of Tanzania, and the conservation and management of her natural resources for the benefit of present and future generations*". Hence, expected results emanating from effective and efficient implementation of the Strategy will lead to; (i) sustainable supply of forest products and services, (ii) increased employment opportunities and foreign exchange earnings, (iii) enhanced ecosystem stability, and (iv) enhanced national capacity to develop and manage the forest sector.

CHAPTER TWO

SITUATIONAL ANALYSIS

2.1 Overview

Situational analysis provides the basis for formulating strategies and targets of the Implementation Strategy. Four main policy areas namely: forest land management, forest-based industries and products, ecosystem conservation and management, and institutions and human resources were considered during the analysis. The situational analysis also includes HIV/AIDS and the current increase of Non-Communicable Diseases (NCDs), gender and governance as the cross-cutting issues.

2.2 Forest Land Management

The forest land management policy area is designed to ensure sufficient forest area is maintained for sustainable supply of forest products and services. Three specific areas of focus targeted under forest land management comprise central and local government reserves, unreserved forest lands, and private and community forestry. In line with these specific areas, seven policy statements accompanied with directions are stipulated to promote effective management of forests including establishment of the legal framework for private and community-based ownership of forests and trees. Emphasis is placed on effective management of all types of central, local and village governments, and private forest reserves based on forest management plans. Along with this, it is insisted to ensure efficient management and conservation of the central and local governments' forest reserves by one or several specialized executive agencies or by private sector.

Moreover, joint management agreements with user rights and benefits to enable participation of all stakeholders in forest management and conservation are stipulated, as a key management approach. It is further underlined to promote sustainable management of industrial plantations and natural forest reserves by one or several specialized executive agencies or the private sector on a fully commercial basis through lease, concession or joint management agreements. Equally, promoting allocation of forests and management responsibilities to villages, private individuals, or government including demarcating and establishing new forest reserves is stressed. Further, it is directed to ensure villages, individuals and government manage forest reserves for production and or protection based on sustainable management objectives defined for each forest reserve. This goes hand in hand with providing support to private and community forestry activities through extension service and financial incentives.

Following the Policy approval in 1998, several achievements have been attained to maintain forest area under effective management. The National Forest Resources Monitoring and Assessment (NAFORMA) that was conducted between 2009 and May 2015 established the state of forests in Tanzania Mainland, useful for general planning and decision-making on management and utilisation of forest and tree resources in the country. NAFORMA report shows that the forest land area is about 48.1 million ha in Tanzania Mainland. It also shows the extent of distribution by forest types and ownership, whereby Woodlands cover 44.6 million ha (93%) of the forestland while catchment forests; mangroves, coastal forests and government forest plantations occupy 3.4 million ha (7%). Furthermore about 20 million ha of the forestland is production forests and 28 million ha are protected forests found in forest reserves and other protected areas. The regeneration of natural forests is quite good – up to 3000 tree seedlings/wildings per ha. The growing stock is estimated as 3.3 billion cubic metres (cubic metres), of which closed forests account for 11.3% while woodlands account for 73.9%. The remaining 14.8% is accounted for by Trees outside Forests (ToF).

The existing forest tenure arrangements are under central government (34.5%), local government (6.5%) and village governments (45.7%), private (7.3%) and unreserved forests (6.0%). The highest percentage of forestland is owned and managed by village governments. However, 19.67 million ha (89.8%) of forests in village lands is unreserved (open access forest areas) and is subjected to unsustainable practices such as agricultural expansion, wild fires, livestock grazing and illegal harvesting. The Government introduced Participatory Forest Management (PFM) that is being promoted all over the country to improve management of forest resources. There are two approaches to PFM. These are Joint Forest Management (JFM) and Community-Based Forest Management (CBFM). JFM takes place on reserved land owned and managed by either the government (central or local) or private sector. In this approach, forest- adjacent communities enter into joint management agreements to share responsibilities, costs and benefits with the owner. CBFM takes place on forests in village lands and reserved forests from general lands. In this arrangement, the local communities have full mandates to own and manage forests. However, there has been a decrease in total area covered by JFM from 5.4 million ha to 3.2 million ha due to unclear benefit sharing structure and inadequate mechanisms to promote and coordinate PFM initiatives across the country. CBFM covers about 2.7 million ha mainly on forests in village lands and reserved forests from general lands.

Production natural forests and plantation forests which cover about 20 million ha or about 41.6% of the total forest land are currently being harvested for wood products like timber, poles, logs for pulp and paper, particle boards and veneer, charcoal and firewood. They are also being harvested for non-wood products like fruits, mushrooms, honey, nuts, medicinal plants and barks for making bee hives. The main problem facing these forests is unsustainable harvesting of these products. Inadequate law enforcement due to poor accessibility to most parts of the forests, use of poorly designed and outdated harvesting techniques or methods, and non-existence or poorly planned and constructed forest roads, are cited as the main factors contributing to indiscriminate harvesting and loss of wood and non-wood products, forest degradation, soil erosion and siltation of rivers and dams. Studies also show that unsustainable and uncontrolled forest harvest also has impact on climate change and on the livelihood of the surrounding communities. For timber and other forest products to be certified, the whole harvesting process must follow or adhere to environmentally sound harvesting principles.

Production of quality tree seed and propagating materials for plantation and community forestry has been also increasing. Tree seed supply has been improved with the current annual production of over 18.3 tonnes although the demand is 40 tonnes. Regarding commercial forestry, area under commercial plantations is increasing and covers about 610,000 ha, which represents 1.3% of the total forest area, and the private sector has started to engage in commercial forest plantations and tree growing. The total annual supply of wood at national level is estimated at 83.7 million cubic metres.

In ensuring effective participation of Tanzania in climate change issues, in 2009, the National REDD framework was developed, followed by the National Climate Change Strategy in 2012 (recently updated in 2021) and the National REDD+ Strategy in 2013. The Government is engaged in developing the capacity, knowledge and mechanisms to implement the REDD+ commitments expressed in the Strategy. On international development cooperation for the sector, Tanzania has signed several protocols and internationally committed itself to comply with the international obligations associated with the forest sector. These include; Southern African Development Community (SADC) Protocol on Forestry (2002), East Africa Forest Policy (2020) and its Strategy (2021 – 2031), African Forest Landscape Restoration Initiative (AFR100) and United Nations Framework Conventions on Climate Change (UNFCCC, 1992). These Conventions include; the Paris Agreement of 2015, United Nations Convention on Combating Desertification (UNCCD), Convention on Biological Diversity (CBD), UN Forest Instrument adopted in December 2015 and Sustainable Development Goals (SDGs).

Notwithstanding these achievements, most natural forests are degraded and deforested. According to the NAFORMA report (2015), the annual rate of deforestation was estimated as 372,816 ha. Recent estimates by Tanzania's National Carbon Monitoring Centre (NCMC) in 2018 show that the annual rate of deforestation has increased to 469,420 ha. The main causes of deforestation are increasing population, forest clearing for agriculture, wild fires, persistent reliance on wood fuel for energy, over-exploitation of wood resources and unsustainable land use practices. There is also inadequate engagement of community in agro-forestry as means of forest land management. This loss is contributing to emission of greenhouse gasses which have impact on global warming and the resulting climate change.

Among the well-known effects of climate change on forest resources include overall reduction of growth rates, possible loss of some species, migration of some species to higher altitudes and changes in the reproductive biology (phenology). In times of drought, fires may be more intensive, causing losses of forests while in case of floods, huge erosion and loss of trees is likely. It has been revealed that the subtropical thorn woodland (Itigi thicket forest ecosystem which covers

456,101 ha only) currently in existence in Tanzania may completely disappear, and that subtropical dry forest and subtropical moist forest will decline by 61.4% in the country. The results will be an increase in tropical very dry forest, tropical dry forest and tropical moist forest and replacing the current life zones. This means that Tanzania's forests will be changing and getting drier. All these will definitely impact on the forest management processes and more importantly on the available products and services.

There is also little in the form of tree improvement through establishment of seed orchards and biotechnology (particularly vegetative propagation and tissue culture), which could boost productivity. In areas with wood deficit, little is being done to find fast growing substitutes such as bamboo. To meet the rising demand for wood, investigations had been carried out on growing of bamboo which matures in 5 to 7 years. Bamboo has many benefits including rapid biomass accumulation, carbon sequestration, absorption of heavy metals and suitability for rapid regeneration of degraded landscapes. It has versatile uses in construction, furniture and artisanal products. However, there are inadequate mechanisms to promote bamboo production for industrial use in the forest sector.

In this case, the following are summarised challenges that are facing the natural forest land management: conversion of land for other economic use due to population pressure, wild fires, persistent reliance on traditional wood fuel for energy, and over-exploitation of wood resources. Other challenges include disappearance of unique forest species, unreserved and inefficient management of village forests. On the other hand, forest plantations and woodlots are faced with the following challenges: low productivity due to inadequate adherence to silvicultural treatments, low availability of improved seeds, occurrence of pests and diseases, and inadequate extension services. Similarly, inadequate financing, low engagement in Public-Private Partnership arrangements such as lease, concessions and joint management agreement are challenges facing the establishment and management of forest plantations and woodlots. Other challenges include limited forest land tenure, inadequate certified forests mechanisms, over-reliance on traditional species and inadequate supply of quality seeds and fertilisers. Apart from the aforementioned challenges, large plantation forests are faced with business environment-related challenges that are required to be preserved and non-productive land which creates additional costs.

2.3 Forest-Based Industries and Products

This area is meant to increase value-addition, employment, government revenue, and foreign exchange earnings through sustainable forest- based industrial development and trade. There are five specific areas of policy focus, which constitute development of wood-based industries; wood fuel; beekeeping; eco-tourism, other non-wood-based industries and products; and trade in forest products and services. Emphasis is placed on industrial forest- based development through investing in mechanical and chemical wood industry. Encouraging and supporting wood fuel production and manufacturing of artisanal wood-based products is further emphasised.

Correspondingly, the use of improved technologies, establishment of woodlots and plantations, promoting the use of lesser-used plant species in artisanal activities is insisted. Incorporation of beekeeping in enhancing management of forest reserves and development of forest-based eco-tourism with local community involvement are also encouraged. Another area of emphasis is to encourage investment in non-wood forest industry, product development and marketing.

Since approval of NFP 1998, forest sector is experiencing new developments in terms of industry growth and emergence of new value chains. Focusing on formal forest industries, to date, there about 642 primary processing industries which include 621 sawmilling, nine (14) pole treatment plants, 22 engineered wood processing firms, 2 bio-mass charcoal and briquetting factories and, one pulp and paper mill. Other forest-based industries are logging industry, matches manufacturing, and tannin extraction. There has been growth and increase in secondary wood Industries including furniture making, carpentry, joinery and wood carving. More investment in similar industries such as Medium Density fibre boards, particle boards and plywood are in the pipeline in response to growing local, regional and global demand for wood products. In addition, the furniture industry is the biggest employer (70%) in the commercial forestry in Dodoma, Dar es Salaam, Iringa, Njombe and Kilimanjaro regions.

Unsustainable forest harvest and poorly designed and constructed forest roads normally lead to forest degradation and loss of quality timber and other forest products. Harvesting plans and proper road planning need to be in place to ensure that remote forests are accessible in order to avoid easily accessible forests from being over exploited. Harvest plans and road construction methods or techniques which minimize cost, wood waste, soil erosion, stress and accidents to forest workers need also to be introduced and emphasized.

In the Beekeeping industries, there are 37 industries, 4 of them being the medium firms and 33 being the small firms. Most of the beekeeping industries are mainly processing and packaging honey while only one (1) firm uses honey for wine making. Further, there are three (3) firms that are processing beeswax in the country. There are also notable efforts in promoting non-wood forest products, wood-fuel, establishment of plantations as sources of raw materials and eco-tourism. For instance, to date 20 nature reserves are practicing eco-tourism in the country. Furthermore, there are 23 plantations established under central government alone and the private sector have been investing in forest plantations and tree planting to ensure supply of raw materials to the wood processing industries.

Notwithstanding these achievements, forest-based industry and product development face several challenges. The majority of the wood processing industries are using obsolete, inefficient and inappropriate technologies such as mobile circular saws, saw benches and hand saws, resulting in high wastage of wood and very low recovery rates (less than 30%). In charcoal production, the recovery rate is not more than 20% because of predominance of inefficient technologies. Similarly, the waste in the processing of indigenous trees is estimated to be 60%. Wood processing industries are also facing inadequate supply of quality raw materials, limited investment especially in high value wood products such as engineered wood products (EWPs) and sustainable charcoal production, inadequate financing and limited access to high value markets for forest products.

Likewise, development of the artisanal wood-based industry that employs over 100,000 people is hampered by lack of efficient production technologies for high quality products. The existing technologies are wasteful and unsuitable which results to low economic benefits and lack of prestige/attractiveness to wood art. In addition, the use of inefficient technologies results to log waste in the artisanal wood-based industry of about 70%. There is also limited availability of the famous species such as Mpingo (*Dalbergia melanoxylon*) and Ebony *(Diospyros mespiliformis)* is also rapidly declining and low awareness on the usefulness of lesser-used species in wood art. In addition, the furniture industry which is the biggest employer in the forest sector is dominated by informal micro and small factories with limited growth.

Non-wood forest products (NWFPs) include, but not limited to, leafy vegetables, bee products, gums and resins, mushrooms, spices, fruits, foliage, and roots and bark used in traditional medicines. These products are plentiful in indigenous forests and are widely harvested and used by local communities for food, medicine, frankincense, perfumes, myrrh and essential oils. These products have high demand in internal and external markets. However, these opportunities are not exploited due to limited capacity to produce, process and package them appropriately. Industries engaged in the processing or value addition of NWFPs such as fruits, nuts, medicinal plants, gums, resins, barks, natural dyes, aromatics and fibres are very few. They can be the major source of forest-based employment of the rural and urban people. However, they are facing the same challenge of inefficient technologies for value addition.

Hence, the summarised challenges facing forest industries include adoption of inefficient technology in wood and non-wood processing, poor infrastructure, limited working capital, inadequate commercialisation mechanisms of sustainable charcoal production, and inadequate business enabling environment for attracting forest industrial investments. Similarly, the forest industries are faced with limited access to high value markets for forest products, absence of industrial clusters to promote integrated processing, limited wood and non-wood product diversification and value addition, and inadequate supply of quality raw materials.

Other challenges include limited consideration of occupational health and safety measures, over-dependence on traditional forest species for industrial use and production of low quality forest products. Moreover, the sector is faced with relatively high logistic costs to source raw materials contributed by an absence of industrial clusters for integrated processing, limited wood and non-wood quality certification and assurance mechanisms, and inadequate mechanisms for promoting Public-Private Partnerships (PPP). There is also inadequate growth of forest-based industries in PFM initiatives. Inadequate regulatory business enabling environment, especially public procurement and forest sector tax structure, to support the growth of forest industries and trade is an additional challenge.

2.4 Ecosystem Conservation and Management

This policy area is advancing measures to enhance ecosystem stability with emphasis on conservation of forest biodiversity, water and soil fertility. Three specific areas of policy focus include forest biodiversity conservation, integration of wildlife in forest management, and adoption of environmental impact assessment (EIA) for investments in forest lands. Establishment of new forest reserves and nature reserves in areas of high biodiversity value is insisted to ensure forest biodiversity conservation. Moreover, it is underlined to establish new catchment forest reserves in critical watershed areas to protect and sustain water sources and soil fertility. Altogether, strengthening of biodiversity research, information dissemination, involvement of other stakeholders, and management of these forests based on the approved management plans are emphasized. Additionally, incorporation of forest biodiversity conservation in the management regimes of natural production forests and plantations is a priority.

The importance of incorporating wildlife management in forest management is recognized and guided to be part of the areas of focus. This is due to the fact that about one third of the country's area is conserved as protected area in the form of forest reserves, nature forest reserves, marine parks, national parks, game reserves and game-controlled areas. On the other hand, it is underlined that EIA must be conducted to minimize damage to the forest environment for investments, which convert forest land to other land uses or may cause significant destruction.

Following the policy approval, a national biodiversity strategy and action plan was developed and concluded in year, 2020, the Tanzania Biodiversity Information Facility (TanBIF) has been established. There are 20 Nature Forest Reserves (NFRs) covering an area of 867,449 ha managed for biodiversity and water conservation. Forest management plans are incorporating the concepts of biodiversity conservation of natural production forests and ecotourism. There are also about 1.4 million ha of gazetted catchment forests and NFRs and the country has over 10,000 plant species, hundreds of which are nationally endemic.

Tanzania is party to the Convention on Biological Diversity (CBD). With about 14,000 known plant and animal species, Tanzania is among top 12 countries with high biodiversity and among 15 countries with the highest number of endemic species. In the Eastern Arc Mountains, researchers have identified 96 endemic species of vertebrates, 43 species of butterflies, sunbirds, chameleons. These are rare species within a relatively small area, which emphasizes the uniqueness of these forests. Only a few places on earth have comparable densities of endangered endemic species.

Globally there are 25 recognized biodiversity hotspots of which the Eastern Arc Mountain Forests and the Coastal forests of Tanzania are included. Further, the Great Lakes are recognised for their uniqueness in Cichlid fish and the Marine coral reef ecosystems while the grassland savanna is recognised for their uniqueness for large mammals. Tanzania accounts for more than one-third of total plant species in Africa. All these attract the attention of the international community. Loss of biodiversity is therefore an issue of profound concern and requiring utmost attention.

The Ministry has been involving other stakeholders in the management of watersheds. For example, the Project on Securing Water Services through Sustainable Land Management in Ruvu and Zigi Catchments (2015 – 2020) has involved local communities in the management of watershed. Furthermore, the coordination between forest and wildlife authorities has been improved to a large extent and EIA is conducted prior to investments in the forest areas. The present network of Wildlife Protected Areas (PAs) in Tanzania comprises of 28

Game Reserves, 42 Game Controlled Areas and the Ngorongoro Conservation Area.

While recognising these achievements, forest ecosystems are still facing a number of challenges. There is low level of awareness on environmental and economic values of forest biodiversity and uncontrolled human activities that lead to deforestation and forest degradation. There is inadequate baseline and updated data on forest biodiversity, destruction of water sources, created sedimentation and peak floods, spread of invasive and alien species. Additionally, fire preventive measures such as the placement and management of firebreaks are inadequately implemented in most forests. Active prevention of pests and diseases in the country is at a low scale. Currently, there are no mechanisms to ensure that users of water contribute to the costs of conserving these forests. Further, collaboration among the related sectors is weak, resulting in destruction or degradation of some catchment forests.

2.5 Institutional and Human Resource Capacity

The policy area is meant to ensure that the national capacity is available to manage and develop the forest sector in collaboration with other stakeholders. Thirteen specific areas of policy focus have been targeted to enhance the national capacity. These include policy analysis and planning; legal and regulatory framework; forest administration; and capacity of the local government, forestry research, and forestry training. Other areas of focus consist of extension services, non-governmental organizations (NGOs), which include Faith Based Organisations (FBOs) and Community Based Organisations (CBOs), private sector, local communities, and financing that covers both the national and international stakeholders.

Institutionally, several policy statements and directions are stipulated to enhance national capacity of the sector. Undertaking periodic updating and harmonization of forest legislation with related sectors is prioritized meanwhile it is insisted to develop and manage forests sustainably. It is further underlined to determine royalties, other fees, and prices of forest products and services that reflect the economic values and/or market values.

Moreover, strengthening the links and coordination of forest matters between central and local levels is notably emphasized. This includes promoting cross-sectoral coordination and reinforcing the links between the research institutions and users; and establishment of cost sharing mechanisms and research funds. Recruitment of qualified and competent forestry staff for local government, promotion of in- service training and well-functioning extension services are insisted. Additionally, establishment of an enabling environment for private sector and local community involvement; and mechanisms for sectoral self-financing and coordination for international financing within the sector are underlined.

Implementation of NFP 1998 has led to significant achievements in the forest sector. Policy instruments for ensuring systems and procedures to effect proper management of sectoral affairs are in place. The Forest Act Cap 323 was enacted in 2002 as a legal instrument and became operational through the Forest Regulations Government Notice No. 153 of 2004. The amendments in the Forest Cap Act 323 were made in 2018/19 to recognize the Chief Executive, Tanzania Forest Services Agency (TFS), the Establishment Order and the Agency' mandates in the forest sector. The Village Land Forest Reserve (Amendment) GN. No. 688 of 2020 was gazetted to facilitate legal protection of unreserved forest lands. Determination of royalties, other fees and pricing of forest products and services that reflect economic values/ market values has been taking place since 2013 with periodic review interval of two years. The Central and Local Governments through the Ministry of Natural Resources and Tourism and President's Office, Regional Administration and Local Government have the memorandum of understanding (MoU) since, 2016 on strengthening forest management and governance.

The National Forest Programme (2001) promoted stakeholders' coordination and attracted financing in the sector from both domestic and international stakeholders to implement different projects and programmes. These projects and programmes include Tanzania Forest Conservation and Management Project (2002-2007); and Forest Policy Implementation Support (1995-2007). Other projects include East Usambara Conservation Area Management Project (1999-2002); NFP Coordination Support Unit Project (2003-2006) and Support to Forestry College Curriculum review in Malawi, Tanzania and Zambia project (2003-2005).

In promoting skills development for private sector, the Private Forestry Programme (2014-2018) was implemented and resulted to an establishment of Forestry and Wood Industries Training Centre in Mafinga. Forestry and Value Chain Development Programme (2018 - 2021) is advancing responsible private sector involvement in managing forest reserves. Additionally, a library and lab facilities has been constructed at Forest Industries Training Institute to enhance skills development.

Institutions and funding mechanisms to manage the sector and promote sectoral self-financing are in place. The Tanzania Tree Seed Agency (TTSA), and Tanzania Forest Services (TFS) Agency were established in 2003 and 2010 respectively to strengthen the capacity to manage forest and tree seed resources. Later in 2019, TTSA was abolished as part of the government cost reduction measures and its functions were absorbed into TFS with similar function. The National Carbon Monitoring Centre (NCMC) has been established to monitor deforestation, emissions and account for GHGs and carbon offset leading to trading and adding value to forest resources.

Tanzania Forestry Research Institute (TAFORI) has been mandated to conduct, coordinate and manage forestry-based research projects. The government has continued to strengthen forest research through TAFORI to generate data and information for informed decision making. To coordinate, guide and implement demand-driven research, TAFORI developed the second National Forestry Research Master Plan 2011 – 2020 and recently the third National Forestry Research Master Plan 2021 – 2031. The main source of forestry professionals is College of Forestry, Wildlife and Tourism (CFWT) at SUA and the Institute of Resource Assessment at the University of Dar es Salaam. Together, these universities have capacity to produce 150 foresters annually. FTI produces 200 forest technicians annually while FITI graduates 30 technicians per year. FTI and FITI are managed under the ministry responsible for forestry. Moreover, the Eastern Arc Mountains Conservation Endowment Fund (EAMCEF) and the Tanzania Forest Fund (TaFF) were established in 2001 and 2010 respectively to promote sectoral self-financing. Recently, the Paramilitary Service was established to ensure effective management of forest resources.

Efforts have been made to ensure adequate employment of skilled workforce in the sector. The main employers of foresters are the Central Government, Local Government Authorities (LGAs), NGOs and private sector. Currently, the government employs 1,932 foresters of whom 1,452 are in Central Government and 480 in regional secretariats and in Local Government Authorities. Some tasks such as forest guarding of national forest reserves as temporary measure was outsourced to National Service Army (Jeshi la Kujenga Taifa – JKT) prior to employment of Forest Guards. Extension services are undertaken through sharing of promotional materials, radio and TV programmes. The providers include government, NGOs and private sector.

Without undermining these achievements and initiatives, there is still fragmented chain of command in managing forest resources between the central and local levels. There is inadequate skilled workforce to manage and develop the forest sector especially in the commercial forestry. Currently, adequate professional management services are not assured for all forests. The estimated need is 4,249 foresters, so the deficit is currently 2,317 foresters. Thus, the sector is operating at 45.47% of the required minimum capacity. Under ideal conditions, a professional forester should manage up to 5,000 ha of natural forest. However, the sector currently has on the average over 20,000 ha per forester. With the current forest estate of 48.1 million ha, the sector will require over 9,000 professionals in the future.

In addition, there is limited capacity of private sector organisations to coordinate their stakeholders and low participation of wider forest sector stakeholders in the implementation of international protocols. With decentralization and private sector developments in forestry and institutional reforms, training is an important instrument for facilitating skills development. However, at professional and technical education levels, there are weaknesses and gaps in the coverage of some areas such as limited technical skills for wood and non-wood product development and value addition, agroforestry and commercial and urban forestry. Further, managerial and business skills are not well developed.

At the vocational level, there is a shortfall following closure of two vocational training institutions which were located at North Kilimanjaro and Sao Hill forest plantations. This reflects inadequacy of capacity to address forestry issues especially at the village and local authority levels and weakens efficiency of forest industries. The Tanzania Association of Foresters (TAF) is a body with capacity to monitor and regulate professional conduct but currently it is not empowered to do so and has not developed the essential tools for this task.

The challenges facing research include inadequate capacity to implement planned research programmes and weak dissemination of research findings due to declining extension capacity. There is precious little research on indigenous trees. This is a weakness that impedes the development of indigenous species which are more resilient to climate change and other risks. The current trend in extension services reflects fragmentation across related sectors resulting in increased illegal activities, and inappropriate management of forests.

Other challenges include limited institutional capacity and inadequate assessment mechanisms on sustainable forest management and self-financing such as broadening of the revenue base, introduction of charges for other products and services and undertaking full valuation of the resource use and improvement of revenue collection. Specifically, inadequate sustainability of forest land management is contributed by, among other things, inadequate capacity of paramilitary service in terms of human resources and financial sustainability. At international cooperation level, opportunities provided under various conventions, agreements and mechanisms for interventions having global significance are not fully explored and utilised. This will be tied such as biodiversity conservation and climate change.

2.6. Cross-Cutting Issues

The development of the forestry sector is influenced by several factors. Governance, HIV/ AIDS and gender are some of key cross cutting policy issues which have been given a priority.

2.6.1. HIV/AIDS

Mainstreaming of HIV/AIDS awareness programs enhance the sustainability and productivity of the sector by reducing the impacts of HIV/AIDS and stigma among the forestry sector workforce and the surrounding communities. Forest sector activities may be associated with various social relations and urbanisation, which may contribute to the spread of HIV/AIDS among the local communities. Furthermore, it is of great importance to address all sorts of stigma to the people who are living with HIV/AIDS in the forest sector and surrounding communities in order to curb discrimination and promote inclusiveness in the sector.

2.1.2. Gender

Integration of gender issues may promote economic inclusiveness in the forestry sector and social welfare. However, the sector is male-dominated and most women have been engaging in the primary production stage such as tree nursery management and tree planting. Few women are engaged in the secondary production stage i.e. wood processing and non-wood processing firms, and even less in the marketing of wood products. The majority of women have been employed in the few-engineered wood processing firms at the operational level.

2.6.3. Governance

Good governance ensures that the sector and associated reforms realise the expected social and economic potentials for the benefits of the larger population. It further ensures effectiveness and efficiency in monitoring and evaluation and in promoting ethical behaviour of key actors in the sector including stemming corruption. It also demonstrates how key actors in the sector can be engaged to ensure that the sector benefits the larger population and the entire economy.

CHAPTER THREE

VISION, MISSION AND OBJECTIVES

3.1 Overview

This chapter consists of the forest sector vision, mission and objectives of the NFP Implementation Strategy. The Vision and Mission statements have been formulated while the Implementation Strategy has adopted objectives of the NFP.

3.2 Vision and Mission

3.2.1 Vision

A vibrant forest sector that contributes significantly to socio-economic development while sustaining the resource base.

3.2.2 Mission

To effectively manage and enhance utilisation of forest and tree resources for sustainable supply of forest products and services to meet national and global needs.

3.3 Policy Objectives

3.3.1 Overall Goal

To enhance the contribution of the forest sector to the sustainable development of Tanzania and the conservation and management of her natural resources for the benefit of present and future generations.

3.3.2 Specific Objectives

The specific objectives of the policy are:

(i) Ensured sustainable supply of forest products and services by maintaining sufficient forest area under effective management;

(ii) Increased employment and foreign exchange earnings through sustainable forest-based industrial development and trade;

(iii) Ensured ecosystem stability through conservation of forest biodiversity, water catchments and soil fertility and;

(iv) Enhanced national capacity to manage and develop the forest sector in collaboration with other stakeholders.

CHAPTER FOUR

IMPLEMENTATION STRATEGY

4.1 Overview

This chapter consists of policy issues, objectives, strategies, targets and outcome indicators. Policy issues were derived from the challenges presented in the situational analysis while the Implementation Strategy has adopted the same objectives of NFP, 1998. Specifically, issues, objectives, strategies, targets and outcome indicators have categorically been aligned with four core NFP areas namely: forest land management, forest-based industries and products, ecosystem conservation and management, and institutions and human resources. In addition, cross-cutting issues that comprise HIV/AIDS, gender and governance have been incorporated in the Strategy.

4.2 Forest Land Management

Issue: Inadequate supply of forest products and services due to deforestation, forest degradation; and insufficient extension services and tree farming inputs.

Objective A: Ensured sustainable supply of forest products and services by maintaining sufficient forest area under effective management.

Strategies for Natural Forest

(i) Strengthen the management of natural forest resources and carbon stocks.

(ii) Promote stakeholder's engagement in natural forest management.

(iii) Promote tree growing and regeneration.

(iv) Promote sustainable harvesting of forest products in production natural forests.

(v) Encourage the utilisation of alternative and lesser-used forest species for natural forest protection.

Targets for Natural Forests

(i) Natural forest area under Central, Local Authority and Private forest reserves are managed in accordance with approved Forest Management Plans increased from 10 million ha to 20 million ha by June, 2031;

(ii) Natural Forest resources data management system updated and functioning by June, 2031;

(iii) Certified natural forests increased from 1 to 20 by June, 2031,

(iv) Area under JFM increased from 3.2 million ha to 7.2 million ha in June, 2031;

(v) Area under CBFM increased from 2.7 million ha to 16 million ha in June, 2031;

(vi) Farmers practicing Agro-forestry systems increased from 4 million to 15 million by June, 2031;

(vii) Tree seed banks increased from 1 to 3 by June, 2031;

(viii) Botanical gardens increased from 8 to 15 by June, 2031;

(ix) Forest land area of 5.2 million ha restored by June, 2031;

(x) JFM benefits sharing agreement reviewed and implemented by June, 2023.

(xi) Deforestation rate of 462,000 ha per year reduced by 70% by June, 2031;

(xii) A total of 18.5 million ha of forest reserve boundaries demarcated and managed by June, 2031;

(xiii) Natural forest area affected by Invasive and alien species and climate change reduced by 60% by June, 2031;

(xiv) Natural forest area affected by wildfire incidences reduced by 70% by June, 2031;

(xv) Bamboo production and utilization promotion mechanisms developed by June, 2026;

(xvi) Stakeholders' engagement mechanisms on the utilisation of lesser-used forest species with relatively high economic potential developed by June, 2024.

(xvii) Sustainable forest harvesting plans under different tenures developed by June, 2028.

(xviii) Regulations and guidelines for planning, construction and maintenance of forest roads developed by June, 2028.

(xix) Mechanism for Public-Private Partnership arrangements such as lease, concessions and joint management agreement in promoting sustainable management of natural forest reserves developed and implemented by June, 2031.

(xx) Mechanism to increase consumption of alternative charcoal in urban areas from 100 to 200,000 tonnes developed and implemented by June, 2031.

Outcome Indicators for Natural Forests

(i) Change in area under natural forest reserves;
(ii) Change of growing stock in natural forests;
(iii) Change in carbon stocks (above and below ground carbon)
(iv) Percentage change in incidences of land-use conflicts and illegal harvesting of forest products;
(v) Percentage change of annual natural forest wildfire incidences;
(vi) Change in natural forest cover;
(vii) Change in harvesting cost and forest accessibility.
(viii) Revenues collected from natural forests.

Strategies for Plantation Forests and Woodlots

(i) Strengthen the management of forest plantations and woodlots;
(ii) Promote stakeholder's engagement in the establishment and management of forest plantations and woodlots;
(iii) Promote tree growing and regeneration;
(iv) Encourage the utilisation of lesser-used forest species.

Targets for Plantation Forests and Woodlots

(i) Area under state-owned forest plantations increased from 110,000ha to 210,000ha by June, 2031;

(ii) Area under private forest plantations increased from 500,000ha to 700,000ha by June, 2031;

(iii) Area under community-owned forest plantations/woodlots increased from 120,000 ha to 360,000ha by June, 2031;

(iv) Annual plantation and woodlots wildfire incidences reduced by 80 percent by June, 2031;

(v) Total area replanted including new areas under state-owned forest plantations increased from 10,000ha per year to 20,000ha per year by June, 2031;

(vi) Forest plantations and woodlots managed based on approved technical orders of 2021 increased to 70% by June, 2031;

(vii) Forest pests and diseases occurrences reduced by 80% by June, 2031;

(viii) Plantation forest area affected by Invasive and alien species and climate change reduced by 60% by June, 2031;

(ix) Plantation forest area affected by wildfire incidences reduced by 70% by June, 2031;

(x) Woodlots area affected by wildfire incidences reduced by 70% by June, 2031;

(xi) Small Tree Growers (STGs) receiving extension services increased by 60% by June, 2031;

(xii) Mechanism for Public-Private Partnership arrangements such as lease, concessions and joint management agreement in promoting sustainable management of industrial plantations developed and implemented by June, 2031.

(xiii) Public-private Sector Guidelines in the forest sector developed by June, 2024;

(xiv) Certified plantation forests increased from 2 to 10 by June, 2031;

(xv) Germplasm supply centres increased from 7 to 15 by June 2031;

(xvi) Improved indigenous and exotic tree species increased from 6 to 50 by June 2031;

(xvii) Tree seed orchards increased from 160 ha to 1,000 ha by June 2031;

(xviii) Two (2) Bamboo plantations established by June, 2031;

(xix) Mechanisms for promoting diversity of tree species in the plantation forests and woodlots developed by June, 2024;

(xx) Review of land rent administration in collaboration with the Ministry responsible for land to promote private investment in forest plantations facilitated by June, 2023.

Outcome Indicators for Plantation Forests and Woodlots

(i) Change in area of forest plantations;

(ii) Change in area of community-based plantations/woodlots;

(iii) Change of growing stock (plantations and woodlots);

(iv) Revenue collected from forest plantations;

(v) Productivity in forest plantations and woodlots.

4.3 Forest-Based Industries and Products

Issue: Limited value-added and diversified products in the forest sector that leads to less contribution to employment creation and foreign exchange earnings.

Objective B: Increased employment and foreign exchange earnings through sustainable forest-based industrial development and trade.

Strategies

(i) Promote value addition and diversification of forest products and services.

(ii) Promote marketing and trade of forest products and services.

(iii) Strengthen conducive forest business enabling environment.

(iv) Promote sustainable harvesting of timber and other forest products.

(v) Promote efficient utilisation of forest resources.

Targets

(i) Timber industries increased from 647 to 1,500 in June, 2031

(ii) Engineered wood industries increased from 14 to 45 in June, 2031

(iii) About 50% of Tanzania's charcoal is produced sustainably by June, 2031

(iv) Poles treatment plants increased from 9 to 15 by June, 2031

(v) Four (4) Industrial Clusters established by June, 2031

(vi) Wood and non-wood product quality assurance and certification standards developed and implemented by June, 2022

(vii) Beekeeping industries increased from 64 to 85 in June, 2031

(viii) Forest sites for ecotourism increased from 17 to 30 by June, 2031

(ix) Marketing Information System for wood and non-wood products established by June, 2023;

(x) A Centre of Excellence for forest product development and trading established by June, 2026;

(xi) Accidents in forest industries reduced by 50% by June, 2031

(xii) Forest-based industries in PFM initiatives increased from 20% to 50% by June, 2031

(xiii) Monitoring mechanisms on the costs of doing business in the forest sector developed by June, 2022;

(xiv) Lesser-used and alternative forest species utilization mechanisms developed by June, 2025;

(xv) Public-private partnership mechanisms for forest industry development developed and implemented by June, 2023;

(xvi) Five credit windows in the commercial banks for forest industries and trade increased from 1 to 8 by June, 2031;

(xvii) Single Payment System for the payment of government fees established by June, 2024;

(xviii) Marketing development mechanisms for forest products developed by June, 2024

(xix) Forest industry database system established by June, 2022

(xx) Logging waste for plantations species reduced from 30% to 10% by June, 2031.

(xxi) Sawmilling waste reduced from 60% to 40% by June, 2031.

(xxii) Logging waste for indigenous species reduced from 60% to 30% by June, 2031.

(xxiii) Logging waste in charcoal production reduced from 80% to 30% by June, 2031.

(xxiv) Artisanal wood wastage reduced from 70% to 20% by, 2031.

(xxv) Adoption of efficient technologies to total of 350 out of 647 primary wood processing industries ensured by June, 2031.

(xxvi) Secondary wood processing industries using efficient processing technologies increased by 40% by June, 2031.

(xxvii) Non-wood industries using efficient processing technologies increased by 50% by June, 2031.

(xxviii) A comprehensive national assessment on forest industry tax structure conducted by June, 2023.

(xxix) An assessment on public procurement-based incentives for the forest industry development conducted by June, 2023.

Outcome Indicators

(i) Domestic volume of traded wood and non-wood products;

(ii) Export volume of wood and non-wood products;

(iii) Diversity of wood products;

(iv) Diversity of non-wood products;

(v) Percentage change in volume of sustainable charcoal produced and traded;

(vi) Percentage change of wood volume processed from forest-based industries in PFM areas;

(vii) Number of lesser-used forest species used as industrial raw materials;

(viii) Number of people employed in the forest industry and trade;

(ix) Number of certified forest products;

(x) Number of tourists for eco-tourism;

(xi) Percentage change of deaths, accidents and occupational health hazards.

4.4 Ecosystem Conservation and Management

Issue: Ecosystem instability resulting from deforestation and degradation of the biodiversity habitats.

Objective C: Ensured ecosystem stability through conservation of forest biodiversity, water catchments and soil fertility.

Strategies

(i) Protect and Promote establishment and management of forest reserves for biodiversity conservation.

(ii) Promote stakeholders' participation in ecosystem conservation and management.

(iii) Enhance availability of information on biodiversity.

Targets

(i) Area of NFRs increased from 800,000 ha to 2 million ha by June, 2031;

(ii) Forest area affected by wildfire and other human activities reduced by 75% by June, 2031;

(iii) Forest reserves in urban areas increased from 45,000 ha to 100,000 ha by June, 2031;

(iv) JFM agreements for ecosystem conservation increased from 263 to 500 by June, 2031;

(v) Gene bank for threatened species established by June, 2025;

(vi) Mechanisms for strengthening Biodiversity Management Information System established by June, 2024;

(vii) Incidences of pests, diseases and invasive species reduced by 25% by June, 2031;

(viii) Mechanisms to institute Payment for Ecosystem Services established by June, 2025.

Outcome Indicators

(i) Change in NFRs areas and Number of endemic species

(ii) Number of JFM agreement signed and functioning and Change in species diversity

(iii) Diversity of forest ecosystem types

(iv) Change in water quantity and quality

(v) Number of key beneficiaries directly contributing to management of forest ecosystems

4.5 Institutions and Human Resources

Issue D: Limited institutional capacity to coordinate sectoral interventions.

Objective: Enhanced national capacity to manage and develop the forest sector in collaboration with other stakeholders.

Strategies

(i) Strengthen the capacity of public and private forestry institutions.

(ii) Promote compliance to the national and international forest management standards.

(iii) Strengthen inter-sectoral coordination, stakeholders' participation and cooperation at national and global levels.

Targets

(i) Four (4) forestry training and research institutional capacity improved by June, 2031;

(ii) Forest Management Authority established by June, 2025;

(iii) Coverage of forest extension staff reduced from 25,000 ha per staff to 10,000 ha per staff by June, 2031;

(iv) Forest researchers increased from 100 in 2021 to 400 by June, 2031;

(v) Mechanisms for forest paramilitary service (law enforcement) strengthened by June, 2023.

(vi) Sustainable forest management financing mechanism established by June, 2025

(vii) Bilateral and multi-lateral agreements for development cooperation in the sector implemented by 100% by June, 2031.

(viii) Functioning management information system established by June, 2022;

(ix) Functioning stakeholders' forum established and conducted annually by June, 2031;

(x) Apex body for private sector associations established and operational by June, 2023

(xi) Forest-based tree growers' associations increased from 146 in 2021 to 500 by June, 2031;

(xii) Four (4) credit financing windows for forest sector in commercial banks established by June, 2025

(xiii) Paramilitary Service Regulations and General Orders developed and implemented by June, 2022;

(xiv) The current Forest Act which governs the forest sector reviewed by June, 2023.

(xv) At least 15 strategic research projects developed and operationalised by June, 2031.

Outcome Indicators

(i) Number of development projects
(ii) Coverage of a forester per standard management unit of forest area
(iii) Proportion of research findings adopted
(iv) Accessibility level of information
(v) Proportion of forest and tree growers complying with best forest management practices
(vi) Proportion of forest-based enterprises business support services
(vii) Proportion of tree growers accessing business support services.

4.6 HIV/ AIDS

Issue: Inadequate measures to address HIV & AIDS in the forest sector

Objective E: Impact of HIV and AIDS infections in the forest sector reduced

Strategy

Mainstream HIV/AIDS protection and supportive measures into forest development initiatives

Targets

(i) HIV/AIDS preventive programs increased from 10 to 30 by June. 2031;
(ii) Vulnerable Persons living with HIV and AIDS are 100% supported by June .2031.

Outcome Indicators

(i) Rate of infection
(ii) Mortality rate

4.7 Gender

Issue: Inadequate mainstreaming gender in the forest sector

Objective F: Gender equity and equality in the forest sector mainstreamed

Strategy

Encourage and support women, youths and people with disabilities to participate in all aspects of forest development and management.

Targets

Ten (10) women, youths and people with disabilities forest supporting programmes established by June 2031.

Outcome Indicators

(i) Proportion of females, youths and people with disabilities in the forest value chain

(ii) Proportion of females, youths and people with disabilities in the forest-based associations

4.8 Governance

Issue G: Inadequate mechanisms to address governance challenges issues in the forest sector.

Objective: Enhanced Good governance in the forest sector enhanced.

Strategy

Strengthen transparency, accountability and rule of law in forestry.

Targets

(i) Anti-corruption strategies for forest sector institutions and organizations customized and implemented by June, 2025.

(ii) The Forest council to oversee forest professional matters developed by June, 2023.

Outcome Indicators

Incidences of corruption

CHAPTER FIVE

LOGFRAME FOR NFP IMPLEMENTATION STRATEGY

5.1 Overview

This chapter shows the logical link of the policy objectives with strategies and targets. Moreover, the estimated financial resources, timeframe and responsible institutions to implement this Strategy are presented in this chapter. The total estimated budget for implementing the Strategy for ten (10) years is TZS 21,989,300,000,000. Estimated budget for each policy area is TZS 408,600,000,000 for Forest land management, TZS 21,238,800,000,000 for Forest-based industries and products, TZS 68,000,000,000 for ecosystem and conservation, TZS 270,200,000,000 for institutions and human resources. Budget for cross-cutting issues on HIV/AIDS, gender and governance is estimated to be TZS 3,700,000,000.

5.2 Log Frame for NFP Implementation Strategy

The log frame of the NFP Implementation Strategy is presented in **Table 1**.

Table 1. Log Frame for NFP Implementation Strategy

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
Objective1: Ensured sustainable supply of forest products and services by maintaining sufficient forest area under effective management				
1. Strengthen management of natural forest resources and carbon stocks.	Natural forest area under Central, Local Authority and Private forest reserves are managed in accordance with approved Forest Management Plans increased from 10 million ha to 20 million ha by June 2031.	50,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private Sector, DPs and CBOs/NGOs
	Natural Forests resources data management system updated and functioning by June, 2031.	19,000	June, 2031	MNRT, TFS, NCMC, PO-RALG, LGAs, TaFF, DPs and TAFORI
	Certified natural forests increased from 3 to 10 by June, 2031.	2,000	June, 2031	MNRT, TFS, NCMC, Private sector, TAFORI, SUA, NGOs.
	Deforestation rate of 462,000 ha per year reduced by 70% by 2031.	10,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, CBOs, NGOs, and Private sector
	A total of 18.5 million ha of forest reserve boundaries demarcated and	55,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, CBOs, NGOs, and

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
	managed by June, 2031.			Private sector
	Natural forest area affected by Invasive and alien species and climate change reduced by 60% by June, 2031.	31,000	June, 2031	MNRT, TFS, PO-RALG, Private sector, TAFORI, and SUA.
	Natural forest area affected by wildfire incidences reduced by 70% by June, 2031.	5,500	June, 2031	MNRT, TFS, Private sector, PO-RALG
2. Promote stakeholders engagement in natural forest management.	Area under JFM increased from 3.2 million ha to 7.2 million ha in 2031.	5,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, CBOs, NGOs, and Private sector
	Area under CBFM increased from 2.7 million ha to 16 million ha in 2031.	5,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, CBOs, NGOs, and Private sector
	JFM benefits sharing agreement reviewed by June, 2023.	500	June, 2031	MNRT, TFS, Private sector, PO-RALG
	Farmers practicing Agro-forestry systems increased from 4 million to	4,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, CBOs, NGOs, and Private sector

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
	15 million by June 2031.			
3. Promote tree growing and regeneration.	Tree seed banks increased from 1 to 3 by June, 2031.	1,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector, TAFORI and CBOs/NGOs
	Botanical gardens increased from 8 to 15 by June, 2031.	7,000	June, 2031	MNRT, SUA , TAFORI, NMT, MUHAS, TPRI, COSTECH, TFS
	Forest land area of 5.2 million ha restored by June, 2031.	10,000	June, 2031	MNRT, TFS, NCMC, Private sector, TAFORI, SUA.
4. Encourage the utilisation of alternative and lesser-used forest species for natural forest protection.	Bamboo production and utilization promotion mechanisms developed by June, 2026.	25,000	June, 2026	PO-RALG, MNRT, TFS, LGAs, Private sector
	Stakeholders' engagement mechanisms on the utilisation of lesser-used forest species with relatively high economic potential developed by June, 2024.	250	June, 2024	MNRT, TFS, PO-RALG, LGAs, Private sector, TAFORI and CBOs/NGOs
	Mechanism to increase consumption of alternative charcoal in urban areas	250	June,	MNRT, TFS, PO-RALG, LGAs, Private sector,

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
	from 100 to 200,000 tonnes developed and implemented by June, 2031.		2031	TAFORI and CBOs/NGOs
5. Strengthen the management of forest plantations and woodlots.	Area under state-owned forest plantations increased from 110,000ha to 210,000ha by June, 2031.	35,000	June, 2031	MNRT and TFS
	Area under private forest plantations increased from 500,000ha to 700,000ha by June 2031.	32,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector, TAFORI and CBOs/NGOs
	Area under community-owned forest plantations/woodlots increased from 120,000 ha to 360,000ha by June, 2031.	28,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector, TAFORI and CBOs/NGOs
	Annual plantation and woodlots wildfire incidences reduced by 80 percent by June, 2031.	14,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector and CBOs/NGOs

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
	Forest pests and diseases occurrences reduced by 80% by June, 2031.	7,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector, TAFORI and CBOs/NGOs
	Plantation forest area affected by Invasive and alien species and climate change reduced by 60% by June, 2031.	7,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector, TAFORI and CBOs/NGOs
	Plantation forest area affected by wildfire incidences reduced by 70% by June, 2031.	7,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector, TAFORI and CBOs/NGOs
	Woodlots area affected by wildfire incidences reduced by 70% by June, 2031.	6,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector and CBOs/NGOs
	Small Tree Growers (STGs) receiving extension services increased by 60% by June, 2031.	4,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector and CBOs/NGOs

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
	Certified plantation forests increased from 2 to 10 by June, 2031.	10,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector and CBOs/NGOs
6. Promote stakeholders engagement in the establishment and management of forest plantations and woodlots.	Mechanism for Public-Private Partnership arrangements such as lease, concessions and joint management agreement in promoting sustainable management of industrial plantations developed and implemented by June, 2031	250	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector and CBOs/NGOs
	Mechanism for Public-Private Partnership arrangements such as lease, concessions and joint management agreement in promoting sustainable management of natural forest reserves developed and implemented by June, 2031.	250	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector and CBOs/NGOs
	Review of land rent administration in collaboration with the Ministry responsible for land to promote	500	June, 2023	MNRT and Ministry of Land

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
	private investment in forest plantations facilitated by June, 2023.			
	Public-private Sector Guidelines in the forest sector developed by June, 2024.	500	June, 2024	MNRT, TFS, PO-RALG, LGAs, Private sector and CBOs/NGOs
7. Promote tree growing and regeneration.	Total area replanted including new areas under state-owned forest plantations increased from 10,000ha per year to 20,000ha per year by June, 2031.	10,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector and CBOs/NGOs
	Germplasm supply centres increased from 7 to 15 by June, 2031.	500	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector, TAFORI and CBOs/NGOs
	Improved indigenous and exotic tree species increased from 6 to 50 by June, 2031.	10,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector, TAFORI and CBOs/NGOs
	Tree seed orchards increased from 160 ha to 1,000 ha by June, 2031.	600	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector and CBOs/NGOs

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
8. Encourage the utilisation of lesser-used forest species.	Two (2) Bamboo plantations established by June, 2031.	4,000	June, 2031	MNRT, TFS, PO-RALG, LGAs, Private sector, TAFORI and CBOs/NGOs
	Sustainable forest harvesting plans under different tenures developed by June, 2028.	500	June, 2028	MNRT, TFS, PO-RALG, LGAs, Private sector, TAFORI and CBOs/NGOs
	Regulations and guidelines for planning, construction and maintenance of forest roads developed by June, 2028.	500	June, 2028	MNRT, TFS, PO-RALG, LGAs, Private sector, TAFORI and CBOs/NGOs
	Mechanisms for promoting diversity of tree species in the plantation forests and woodlots developed by June, 2024.	500	June, 2024	MNRT, TFS, PO-RALG, LGAs, Private sector and CBOs/NGOs
Sub-total		**408,600**		
Objective 2: Increased employment and foreign exchange earnings through sustainable forest-based industrial development and trade				
1. Promote value addition	Timber industries increased from 647	10,000,000	June,	PO-RALG, MNRT, MIT,

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
and diversification of forest products and services.	to 1,500 in June, 2031.		2031	MoFP, TIC, TFS, and, Private Sector
	Engineered wood industries increased from 14 to 45 in June, 2031.	6,000,000	June, 2031	PO-RALG, MNRT, MIT, MoFP, TIC, TFS, and, Private Sector
	About 50% of Tanzania's charcoal is produced sustainably by June, 2031.	4,000,000	June, 2031	PO-RALG, MNRT, MIT, MoFP, TIC, TFS, and, Private Sector
	Poles treatment plants increased from 9 to 15 by June, 2031.	2,000	June, 2031	PO-RALG, MNRT, MIT, MoFP, TIC, TFS, and, Private Sector
	Four (4) Industrial Clusters established by June, 2031.	10,000	June, 2031	MNRT, PO-RALG, VPO-Environment, MIT and Private Sector
	Beekeeping industries increased from 64 to 85 in June, 2031.	2,500	June, 2031	PO-RALG, MNRT, MIT, MoFP, TIC, TFS, and, Private Sector
	Forest sites for ecotourism increased from 17 to 30 by June 2031.	20,000	June, 2031	PO-RALG, MNRT, TFS, Academic Institutions, NGOs, CBOs and Private

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
				Sector
	A Centre of Excellence for forest product development and trading established by June, 2026.	2,000	June, 2026	MNRT, TFS,TAFORI, NGOs/CBOs, Academic Institutions and Private Sector
	Forest-based industries in PFM initiatives increased from 20% to 50% by June, 2031.	5,000	June, 2031	MNRT, PO-RALG, MIT, MoFP, TIC and Private Sector
	Forest industry database system established by June, 2022.	500	June, 2031	PO-RALG, MNRT, MIT, MoFP, TIC, TFS, and, Private Sector
2. Promote marketing and trade of forest products and services.	Wood and non-wood quality assurance and certification standards updated by June, 2022.	300	June, 2022	MNRT, PO-RALG, TFS, Academic Institutions, TBS and Private Sector
	Marketing Information System for wood and non-wood products established by June, 2023.	5,000	June, 2023	MNRT, Academic Institutions, TANTRADE, TFS, Private Sector and CBOs/NGOs
	Marketing development mechanisms for forest products developed by	500	June, 2023	MNRT, Academic Institutions,

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
	June, 2024.			TANTRADE, TFS, Private Sector and CBOs/NGOs
3. Strengthen conducive forest business-enabling environment.	Public-private partnership mechanisms for forest industry development developed by June, 2023.	500	June, 2031	MNRT, PO-RALG, MIT, MoFP, TRA, TIC and Private Sector
	Monitoring mechanisms on the costs of doing business in the forest sector developed by June, 2022.	500	June, 2022	MNRT
	Accidents and risks in wood based industries reduced by 50% by June, 2031.	2,000	June, 2031	MNRT, PO-RALG, MIT, MoFP, TIC, OSHA and Private Sector
	Five credit windows in the commercial banks for forest industries and trade increased from 1 to 8 by June, 2031.	500	June, 2031	MNRT, BOT, Commercial Banks and Private Sector
	A comprehensive national assessment on forest industry tax structure conducted by June, 2023.	600	June, 2023	MNRT and MoFP
	An assessment on public	500	June,	MNRT and MoFP

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
	procurement-based incentives for the forest industry development conducted by June, 2023.		2023	
	Single Payment System for the payment of government fees established by June, 2024.	500	June, 2024	MNRT, BOT, Commercial Banks and Private Sector
4. Promote an efficient utilisation of forest resources.	Lesser-used and alternative forest species utilization mechanisms developed by June, 2025.	500	June, 2024	MNRT, PO-RALG, MIT, and Private Sector
	Logging waste reduced from 30% to 10% in plantations by June, 2031.	45,000	June, 2031	MNRT, PO-RALG, MIT, MoFP, TIC, and Private Sector
	Sawmilling waste reduced from 60% to 40% by June, 2031.	48,000	June, 2031	MNRT, PO-RALG, MIT, MoFP, TIC, and Private Sector
	Logging waste reduced from 60% to 30% for indigenous species by June, 2031.	32,000	June, 2031	MNRT, PO-RALG, MIT, MoFP, TIC, and Private Sector
	Logging waste in charcoal production reduced by from 80% to 30% by June, 2031.	35,000	June, 2031	MNRT, PO-RALG, MIT, MoFP, TIC, and Private Sector

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
	Artisanal wood wastage reduced from 70% to 20% by June, 2031.	25,000	June, 2031	MNRT, PO-RALG, MIT, MoFP, TIC, and Private Sector
	Adoption of efficient technologies to total of 350 out of 647 primary wood processing industries ensured by June, 2031.	55,000	June, 2031	MNRT, PO-RALG, MIT, MoFP, TIC, and Private Sector
	Secondary wood processing industries using efficient processing technologies increased by 40% by June, 2031.	48,000	June, 2031	MNRT, PO-RALG, MIT, MoFP, TIC, and Private Sector
	Non-wood industries using efficient processing technologies increased by 50% by June, 2031.	37,000	June, 2031	MNRT, PO-RALG, MIT, MoFP, TIC, and Private Sector
Subtotal		**21,238,800**		
Objective 3: Ensured ecosystem stability through conservation of forest biodiversity, water catchments and soil fertility				
1. Protect and promote establishment of forest reserves for biodiversity	Area of NFRs increased from 800,000 ha to 2 million ha by June, 2031.	3,000	June 2031	PO-RALG, VPO-Environment, MNRT, TFS, Private Sector and

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
conservation.				NGOs/CBOs
	Forest area affected by wildfire and other human activities reduced by 75% by June, 2031.	12,000	June, 2031	MNRT, PO-RALG, VPO-Environment, TFS, Private Sector and NGOs/CBOs
	Gene bank for threatened species established by June, 2031.	500	June, 2031	MNRT, PO-RALG, TFS, TAFORI, Academic Institutions, Private Sector and NGOs/CBOs
2. Promote an involvement of stakeholders in ecosystem conservation and management.	JFM agreements increased from 263 to 500 by June, 2031	20,000	June, 2031	PO-RALG, MNRT, Private Sector and Local Communities
3. Develop urban forest and tree management initiatives.	Forest reserves in urban areas increased from 45,000 ha to 100,000 ha by June, 2031.	27,000	June, 2031	MNRT, TFS, PO-RALG, Private Sector and CBOs/NGOs
4. Enhance availability of information on biodiversity .	Mechanisms for strengthening Biodiversity Management Information system established by June, 2024.	2,000	June, 2024	MNRT, TFS and Private Sector

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
5. Enhance forest protection measures from fires, invasive species, pests and diseases .	Incidences of pests, diseases and invasive species reduced by 25% by June, 2031.	3,000	June, 2031	TAFORI, SUA, TFS and TPRI
6. Establish mechanisms to enable beneficiaries of ecosystem products and services contribute to conservation and management.	Mechanisms to institute Payment for Ecosystem Services established by June, 2025.	500	June, 2025	MNRT, TFS, VPO, LGAs, TAFORI, SUA, UDSM
Subtotal		**68,000**		
Objective 4: Enhanced national capacity to manage and develop the forest sector in collaboration with other stakeholders				
1. Strengthen the capacity of public and private forestry institutions	Four (4) forestry training and research institutional capacity improved by June, 2031.	100,000	June, 2031	MNRT, MoFP, MoEST, and Training and Research Institutions
	Forest researchers increased from 100 in 2021 to 400 by June, 2031.	10,000	June, 2031	MNRT, MoFP, Po-PSM, COSTECH, SUA, TAFORI,

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
				Private sector,
	Coverage of forest extension staff reduced from 25,000 ha per staff to 10,000 ha per staff by June, 2031.	80,000	June 2031	MNRT, PO-PSM, PO-RALG, Private Sector, TFS, and NGOs/CBOs
	Mechanisms for forest paramilitary service (law enforcement) strengthened by June, 2023.	40,000	June 2031	MNRT, TFS, PO-RALG, LGAs,
	Functioning management information system established by June, 2022.	2,000	June, 2022	MNRT, PO-RALG, Private Sector, TFS, and NGOs/CBOs
	Sustainable forest management financing mechanism established by June, 2025.	5,000	June, 2025	MNRT, NCMC, PO-RALG, Private Sector, TFS, Development Partners and NGOs/CBOs
2. Strengthen inter-sectoral coordination, stakeholders' participation and cooperation at national and global levels.	Forest Management Authority established by June, 2022.	200	June 2022	MNRT, PO-RALG, LGAs, and TFS
	Bilateral and multi-lateral agreements for development cooperation in the forest sector implemented by 100% by June, 2031;	10,000	June, 2031	MNRT, PO-RALG, VPO, TFS, NGOs, and Development Partners

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
	Functioning forest sector stakeholders' forum established and conducted annually by June, 2031.	2,000	June, 2031	MNRT, PO-RALG, TFS, Private Sector, and NGOs/CBOs
	Apex body for private sector associations established and operational by June, 2023.	500	June, 2023	MNRT, PO-RALG, TFS and Private Sector
	Four (4) credit financing windows for forest sector in commercial banks established by June, 2025.	500	June, 2025	MoFP, MNRT, BOT, Commercial Banks and Private Sector
	Forest-based tree growers associations increased from 146 in 2021 to 500 by June, 2031.	20,000	June, 2031	MNRT, TFS, CBOs/NGOs and Private Sector
	Paramilitary Service Regulations and General Orders developed and implemented by June, 2022.	500	June, 2022	MNRT and TFS
	The current Forest Act which governs the forest sector reviewed by June, 2023.	200	June, 2023	MNRT, AG and Private Sector

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
	At least 15 strategic research projects developed and operationalised by June, 2031.	200	June, 2031	MNRT, TAFORI, TFS, NGOs, and Private Sector
Subtotal		**270,200**		
Objective 5: Impacts of HIV and AIDS infections reduced in the forest sector				
1. Mainstream HIV/AIDS protection and supportive measures into forest development initiatives	HIV/AIDS preventive programs increased from 10 to 30 by June, 2031.	200	June, 2031	MNRT, TACAIDS, TFS, CBOs/NGOs and Private Sector
	Vulnerable persons living with HIV/AIDS are 100% supported by June, 2031.	100	June, 2031	MNRT, MoHCDGEC, TACAIDS, TFS, CBOs/NGOs and Private Sector
Objective 6: Ensured Gender equity and equality in the forest sector				
1. Encourage and support women, youths and people with disabilities to participate in all aspects of forest development and management	Ten (10) women, youths and people with disabilities forest supporting programmes established by June, 2031.	2,000	June, 2031	MNRT, MoHCDGEC, TFS, CBOs/NGOs and Private Forest Sector Associations

Strategies	Targets	Resources (TZS) *one million	Time frame	Responsible
Objective 7: Enhanced Good governance in the forest sector				
1. Strengthen transparency, accountability and rule of law in forestry	Anti-corruption strategies for forest sector institutions and organizations customized and implemented by June, 2025.	1,000	June, 2025	PO RALG, MNRT, PCCB, TFS, CBOs/NGOs and Private Sector
	The Forest council to oversee forest professional matters developed by June, 2023.	400	June, 2023	MNRT, TFS, CBOs/NGOs and Private Sector
Subtotal		**3,700**		
Grand Total		**21,989,300**		

CHAPTER SIX

ROLES AND RESPONSIBILITIES OF STAKEHOLDERS

6.1 Ministry Responsible for Forest Sector

The Ministry has the overall coordination of the forest sector. Specifically, the Ministry will undertake the following functions:

(i) Policy, strategy, legislation and guidelines formulation and law enforcement;

(ii) Sectoral-planning, budgeting, monitoring, evaluation and Reporting;

(iii) Facilitate national capacity building in forest education, research, marketing and extension services;

(iv) Encourage effective participation of stakeholders in forest and forest industries development;

(v) Promote Public-Private Partnership in forest sector;

(vi) Establish entities and mechanisms that streamline forest and forest industry management;

(vii) Create enabling environment and mechanisms for collaboration with National, Regional and International institutions in forest development;

(viii) Ensure compliance with international standards and guidelines; and

(ix) Ensure fulfilment of commitments made at regional and international protocols and agreements related to forest.

6.2 Key Sector Ministries

Sector Ministries perform activities, which have direct impact to the sector. They will participate in:

(i) Coordination and collaboration in extension, training, research and marketing;

(ii) Collection and dissemination of forest information;

(iii) Enforcing forest laws;

(iv) Preparation of proper land use management plans;

(v) Monitoring, evaluation and Reporting on forest;

(vi) Promoting agroforestry practices; and

(vii) Conserving trees and forest resources.

6.3 Forest Sector Authorities and Executive Agencies

The functions of the Authorities and Executive Agencies are:

(i) Establishing and managing national forest reserves (natural and plantations);

(ii) Managing forest resources in general land;

(iii) Enforcing Forest legislation in its jurisdiction;

(iv) Developing institutional capacity to support forest activities;

(v) Issuing licences, permits and certificates on forest products and research;

(vi) Enforcing the forest law;

(vii) Conducting monitoring evaluation and reporting;

(viii) Collecting Forestry revenues;

(ix) Ensuring harvesting and utilization of forest resources sustainably;

(x) Conducting forest extension services;

(xi) Financing of investment in forest sector;

(xii) Marketing of forest products and services;

(xiii) Providing high quality tree seed and other propagating materials for different end uses;

(xiv) Conducting training to public, private individuals or institutions in the principles; procedures and techniques of nursery establishment and management, safe tree climbing, temporary tree storage and gene conservation

(xv) Providing consultancy in matters related to the practice of the tree seed management and environmental conservation including landscaping, rehabilitation/ vegetation of degraded land

(xvi) Preparing certificate of origin of seed supplied to all export and major domestic customers and

(xvii) Managing, improving and developing the antiquities stations

(xviii) Eco-tourism development in forest.

6.4 Local Government Authorities (LGAs)

As a player in forest management, LGAs will:

(i) Establish and manage local government forest reserves;

(ii) Enforce law;

(iii) Undertake revenue collection;

(iv) Formulate and enforce bylaws

(v) Support communities in establishment and management of forest reserves;

(vi) Undertake monitoring, evaluation and reporting;

(vii) Marketing of forest products;

(viii) Financing of investment in forest sector;

(ix) Conducting forest extension services;

(x) Ensuring harvesting and utilization of forest resources sustainably;

(xi) Production of value-added forest products;

(xii) Eco-tourism development in forest:

(xiii) Ensure capacity building and awareness for staff and local communities; and

(xiv) Promote partnership with private sector.

6.5 Other Government Institutions

Other government institutions will participate in:

(i) Coordination and collaboration in extension, training, research and marketing;

(ii) Law enforcement;

(iii) Collection and dissemination of information;

(iv) Licensing of forest-based industries and trade;

(v) Financing of investment in forest sector;

(vi) Developing quality standards for different forest products

(vii) Providing support in forest resources conservation and management; and

(viii) Creating enabling environment for forest investments.

6.6 Village Governments

The village governments will:

(i) Formulate and enforce by-laws;

(ii) Establish and manage village land forest reserves;

(iii) Undertake revenue collection;

(iv) Supervise and monitor forest activities; and

(v) Support communities in establishment and management of community reserves.

6.7 Local Communities

Local communities will:

(i) Participate in joint management of forest Reserves;

(ii) Produce and process forest products for both local and export markets;

(iii) Production of subsistence and commercial forest products and value added products;

(iv) Be employed in forest management and forest-based industries;

(v) Maintain high quality standards for the forest products in order to be competitive in local and international markets;

(vi) Promote Tree planting; and

(vii) Adapt Agro-forestry systems/farming.

6.8 NGOs, CBOs, Faith-Based Institutions and Media

NGOs, CBO, Faith-based Institutions and Media will implement policy by:

(i) Awareness raising and forest extension services;

(ii) Capacity building;

(iii) Facilitate technical assistance, training, research and technology transfer;

(iv) Financing forest conservation;

(v) Promote gender participation and youth involvement in forest; and

(vi) Sensitize investment in forest industry and trade.

6.9 Private Sector

The Private sector will participate by:

(i) Investing in forest sector;

(ii) Joint management of forest reserves;

(iii) Sustainable harvesting and utilisation;

(iv) Provision of employment

(v) Financing of investments in forestry

(vi) Awareness and extension services

(vii) Conduct market research of forest products and services;

(viii) Production of value-added forest products;

(ix) Eco-tourism development in forest.

(x) Marketing of forest products

6.10 International Community

The International Community will:

(i) Provide financial and technical support;

(ii) Facilitate capacity building in forest sector; and

(iii) Facilitate the implementation of international obligations.

CHAPTER SEVEN

MONITORING AND EVALUATION

7.1 Monitoring and Evaluation Framework

Monitoring and Evaluation (M&E) system assess the extent of progress towards achieving policy objectives. The efficiency of M&E system depends on well-organized components of the system in terms of data collection, analysis and reporting. The overall responsibility for M&E of the Policy implementation lies within the Ministry responsible for forestry. Specifically, the Ministry will coordinate, monitor and evaluate the overall implementation of the Strategy. Effectiveness and efficiency of the M & E system of this Strategy will depend on the reliability of the developed internal monitoring system of each institution. On the other hand, the established internal system will assess efficiency and effectiveness of the respective institutional plans towards achieving the policy objectives.

M&E will involve, among other things, establishing the baseline and performance indicators. Progress on implementation of the milestones and targets will be tracked quarterly while annual review will focus on assessing efficiency and effectiveness of the planned outputs and outcomes indicators. Moreover, case studies, diagnostic studies, surveys and beneficiary assessments will be conducted to track any changes in terms of outcomes realized over the period under review.

7.2 Monitoring and Evaluation Objectives and Guiding Principles

The section consists of M&E objectives and guiding principles. M&E objectives have been divided into two groups which include the overall objective and specific objectives.

7.2.1 Overall and Specific Objectives

The overall objective of M&E Framework is to guide an implementation of the NFP through its Strategy. Specifically, M&E framework intends to:

(i) Establish benchmark;

(ii) Set targets and standards;
(iii) Guide actors' participation in implementation and monitoring activities; and
(iv) Control use of resources during implementation.

7.2.2 Guiding Principles

The M & E system will be guided by the following principles:
(i) Developing capacity of M & E units or section;
(ii) Harmonizing and aligning the framework with other government M&E systems;
(iii) Adopting a result-based-approach;
(iv) Flexibility in reversing M&E framework; and
(v) Starting from the current situation.

7.3 Scope of Monitoring and Evaluation Framework

M&E framework outlays overall trends on the development of the forest sector and includes, but is not limited to, the following:
(i) Assessment on the efficiency of input use and processes;
(ii) Assessment on extent of attainment of outputs, outcomes and impacts of the Strategy; and
(iii) Establishment of databases and reporting framework.

7.4 Performance Indicators

Performance indicators have been categorised into two groups namely output indicators and outcome indicators. Output and outcome indicators are shown in **Table 2**, which also presents the baseline data and the verification sources: -

Table 2: Performance Indicators for Monitoring and Evaluation Framework

Output Indicators	Outcome Indicators	Baseline	Source
Strategic Objective 1: Ensured sustainable supply of forest products and services by maintaining sufficient forest area under effective management			
1. Natural forest area managed in accordance with approved Forest Management Plans	• Change in area under natural forest reserves • Change of growing stock in natural forests	• 25,530,000 ha • 18,800,000 m^3	Resource Assessment Survey and Annual Progress Reports
2. Updated Natural Forests resources data management system in place	• Change in carbon stocks (above and below ground carbon)	• 1,124 million tonnes	
3. Number of certified natural forests	• Percentage change in incidences of land-use conflicts and illegal harvesting of forest products		
4. Deforestation rate of per year	• Change in natural forest cover • Revenues collected from natural forests		
5. Area of forest reserve boundaries			

Output Indicators	Outcome Indicators	Baseline	Source
demarcated and managed			
6. Natural forest area affected by Invasive and alien species and climate change			
7. Natural forest area affected by wildfire incidences	• Percentage change of annual natural forest wildfire incidences		
8. Area under JFM			
9. Area under CBFM			
10. Reviewed JFM benefits sharing agreement in place			
11. Number of farmers practicing Agro-forestry systems			
12. Number of tree seed banks			
13. Number of botanical gardens			
14. Area of forest land restored			
15. Functional bamboo production and utilization promotion mechanisms			
16. Functional Stakeholders’ engagement mechanisms on the utilisation of lesser-used forest species			

Output Indicators	Outcome Indicators	Baseline	Source
17. Area under state-owned forest plantations	• Change in area of forest plantations • Revenue collected from forest plantations	• 610,000 ha	Resource Assessment
18. Area under private forest plantations			
19. Area under community-owned forest plantations/woodlots	• Change in area of community-based plantations/woodlots • Change of growing stock (plantations and woodlots)	• 24,000,000 m^3	Survey and Annual Progress Reports
20. Percentage of annual plantation and woodlots wildfire incidences			
21. Percentage of forest pests and diseases occurrences			
22. Percentage of plantation forest area affected by Invasive and alien species and climate	• Productivity in forest plantations and woodlots.		
23. Percentage of plantation forest area affected by wildfire incidences			
24. Percentage of woodlots area affected by wildfire incidences			

Output Indicators	Outcome Indicators	Baseline	Source
25. Percentage of small Tree Growers (STGs) receiving extension services 26. Number of certified plantation forests 27. Percentage of public and private sector engagements (forest concessions and lease arrangements) 28. Functional public-private Sector Guidelines in the forest sector 29. Total area replanted 30. Functional germplasm supply centres 31. Number of genetically improved indigenous and exotic tree species 32. Number of tree seed orchards 33. Number of Bamboo plantations established 34. Functional Mechanisms for promoting diversity of tree species in the plantation forests and woodlots			
Strategic Objective 2: Increased employment and foreign exchange earnings through sustainable forest-based industrial development and trade			
1. Number of primary wood	• Domestic volume of traded	• NA	Annual Progress

Output Indicators	Outcome Indicators	Baseline	Source
processing industries	wood and non-wood products		Reports, Labour Study Survey, Cost of Doing Business Survey, and Tourist Survey Reports
2. Number of engineered wood industries	• Export volume of wood and non-wood products	• 90,833 m3	
3. Number of sustainable charcoal production industries	• Diversity of wood products	• 20	
4. Number of poles treatment plants	• Diversity of non-wood products	• 3	
5. Number of Industrial Clusters	• Percentage change in volume of sustainable charcoal produced and traded	• NA	
6. Number of Beekeeping industries	• Percentage change of wood volume processed from forest-based industries in PFM areas	• NA	
7. Number of forest sites for	• Number of lesser-used forest	• 3	

Output Indicators	Outcome Indicators	Baseline	Source
ecotourism	species used as industrial raw materials		
8. Operational Centre of Excellence for forest product development and trading	• Number of people employed in the forest industry and trade	• 1,500,000	
9. Percentage of new forest-based industries in PFM initiatives	• Number of certified forest products	• 1	
10. Functional forest industry database system	• Number of tourists for eco-tourism	• 32,657	
11. Updated wood and non-wood quality assurance and certification standards in place	• Percentage change of deaths, accidents and occupational health hazards	• NA	
12. Operational marketing Information System for wood and non-wood products			
13. Functional marketing development mechanisms for forest products			

Output Indicators	Outcome Indicators	Baseline	Source
14. Functional public-private partnership mechanisms for forest industry development 15. Operational monitoring mechanisms on the costs of doing business in the forest sector 16. Percentage of accidents and risks in wood based industries 17. Number of credit windows in the commercial banks for forest industries and trade 18. Comprehensive national assessment on forest industry tax structure conducted 19. An assessment on public procurement-based incentives for the forest industry development conducted 20. Functional Single Payment System for the payment 21. Reviewed Forest Act which governs the forest sector in place			

Output Indicators	Outcome Indicators	Baseline	Source
22. Functional Lesser-used and alternative forest species utilization mechanisms			
23. Percentage of logging waste reduced from 30% to 10% in plantations			
24. Percentage of sawmilling waste			
25. Percentage of logging waste			
26. Percentage of logging waste in charcoal production			
27. Percentage of artisanal wood wastage			
28. Number of primary wood processing industries adopted efficient technology			
29. Percentage of secondary wood processing industries using efficient technology			
30. Percentage of Non-wood industries using efficient processing technologies			
Strategic Objective 3: Ensured ecosystem stability through conservation of forest biodiversity, water catchments and soil			

Output Indicators	Outcome Indicators	Baseline	Source
fertility			
1. Area of NFRs	• Number of endemic species	• 1,650	Annual Progress Reports and Forest Resource Assessment Survey
2. Percentage of Forest area affected by wildfire and other human activities	• Change in species diversity	• 11,000	
3. Functional Gene bank for threatened species	• Diversity of forest ecosystem types		
4. Number of JFM agreements	• Change in water quantity and quality		
5. Area of forest reserves in urban areas	• Number of key beneficiaries directly contributing to management of forest ecosystems		
6. Functional mechanisms for strengthening Biodiversity Management Information system			
7. Percentage of incidences of pests,			

Output Indicators	Outcome Indicators	Baseline	Source
diseases and invasive species in 8. Operational mechanisms to institute Payment for Ecosystem Services			
Strategic Objective 4: Enhanced national capacity to manage and develop the forest sector in collaboration with other stakeholders.			
1. Number of forestry training and research institutional capacity	• Number of development projects	• 4	Annual Progress Reports
2. Number of forest researchers	• Coverage of a forester per standard management unit of forest area	• 20,000ha per forester	Survey reports
3. Coverage of forest extension staff per ha	• Proportion of research findings adopted		
4. Operational Mechanisms for forest paramilitary service (law enforcement)	• Accessibility level of information		
5. Functioning management information system	• Proportion of forest and tree growers complying with best forest management practices		
6. Operational Sustainable forest management financing mechanism	• Proportion of forest-based enterprises business support services		

Output Indicators	Outcome Indicators	Baseline	Source
7. Functional authority for management of forest resources 8. Percentage of implementation of bilateral and multi-lateral agreements for development cooperation 9. Functioning forest sector stakeholders' forum 10. Functional apex body for private sector associations 11. Number of credit financing windows for forest sector in commercial banks 1. Number of Forest-based tree growers associations 2. Operational paramilitary Service Regulations	• Proportion of tree growers accessing business support services		
Strategic Objective 5: Impacts of HIV and AIDS infections reduced in the forest sector			
1. Number of HIV/AIDS preventive progrms	• Rate of infection		Annual Progress Reports
2. Percentage of support to vulnerable persons living with HIV/AIDS	• Mortality rate		Survey reports

Output Indicators	Outcome Indicators	Baseline	Source
Strategic Objective 6: Ensured Gender equity and equality in the forest sector			
1. Number of women, youths and people with disabilities forest supporting programmes	• Proportion of females, youths and people with disabilities in the forest value chain • Proportion of females, youths and people with disabilities in the forest-based associations		Annual Progress Reports Survey reports
Strategic Objective 7: Enhanced Good governance in the forest sector			
1. Customised anti-corruption strategies for forest sector institutions and organizations in place 2. Operational forest council to oversee forest professional matters	• Incidences of corruption		Annual Progress Reports Survey reports

7.5 Data Collection and Analysis

The main approaches for data collection will be the review of existing progress reports, field visits, fora and surveys. Data collected will be analysed and included into the national forest database.

7.6 Monitoring and Evaluation Reports

This section includes types of M&E reports, reporting schedule, reporting flows and feedback mechanisms. M&E reports are expected to provide feedback on the progress made in the course of implementing the Strategy and, inform the immediate and medium-term decisions to be made.

7.6.1 Types of M&E reports

The main M&E reports to be generated include the following: -

(i) Progress reports;
(ii) Reviews;
(iii) Evaluation reports;
(iv) Studies and surveys reports; and
(v) Policy review.

7.6.2 Reporting Schedule

The reporting schedule along with the types of M&E report is presented in **Table 3** below.

Table 3: Reporting Schedule

Types of reports	Contents	Frequency
Progress reports	Consolidated reports covering progress on the utilization of resources and implementation of activities	Quarterly, semi-annually, and annually.
Reviews	Report covering the progress made towards achieving milestones and targets	Semi-annual and annually
Evaluation reports	Reports including achievement of the Policy objectives, challenges, lessons learnt and recommendation for improvement.	Twice (Mid-term in 2026 and Final evaluation in 2031)

Types of reports	Contents	Frequency
Studies and survey reports	Findings and recommendations for improvement on specific issues.	As per need
Policy Review	Report showing overall achievements of the National Forest Policy objectives, challenges, lessons learnt and recommendation for improvement in next version of the Strategy.	After 10 Years

7.6.3 Reporting Flows

Institutions will be responsible for preparation of periodic progress and performance reports on achievements of respective policy areas and forward to the Ministry for consolidation. Consolidated reports will be shared with stakeholders for records keeping and necessary actions. Various internal and external meetings will be conducted to share the progress made towards achieving policy objectives. **Table 4** presents the schedule of meetings to track the implementation progress:

Table 4. Planned Meetings

S/N	Type of meeting	Frequency	Chairperson	Participants
1	Division Meetings	Monthly	Director of Forestry and Beekeeping	All staff of the Division at headquarters
2	Quarterly performance review meetings	Quarterly	Permanent Secretary	All Heads of Divisions and Sections
3	National Forest Advisory Committee	Quarterly	Selected Chairperson among members	Committee members
4	Annual review meetings	Annually	Permanent Secretary	Representative of all key stakeholders
5	Mid review	After five years	Permanent Secretary	Representative of all key stakeholders
6	End review	After ten years	Permanent Secretary	Representative of all key stakeholders

7.6.4 Feedback Mechanism

A feedback mechanism will be instituted between report producers and end-users. This will lead to sharing of achievements, experiences and challenges among stakeholders including identification of collective actions to address challenges. Moreover, the mechanism will improve quality and timely submission of reports.

7.7 Use of Monitoring and Evaluation Information

Stakeholders will use M&E reports for:

(i) Decision making;
(ii) Improving services delivery;
(iii) Improvement in policy implementation;
(iv) Demonstrated results as part of accountability; and
(v) Planning.

7. 8 Action Plan

A National Forest Action Plan that covers four policy areas and cross cutting issues will be developed in a participatory manner after the approval of the Policy Implementation Strategy. The underpinned broad actions of the Strategy will be cascaded into interventions and activities with estimated costs. Through this Plan, each implementing institution will be assigned specific responsibilities that will be outlined in the result framework.

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